

### What Is Claimed Is:

1. An isolated antibody which binds to the Map10 protein from *S. aureus*.
2. An antibody according to Claim 1, wherein said antibody prevents *S. aureus* infection in a human or animal.
3. An antibody according to Claim 1, wherein said antibody inhibits binding of staphylococcal bacteria to eukaryotic cells.
4. An antibody according to Claim 1, wherein said antibody is suitable for parenteral, oral, intranasal, subcutaneous, aerosolized or intravenous administration in a human or animal.
5. An antibody according to Claim 1 wherein the antibody is a monoclonal antibody.
6. An antibody according to Claim 5 wherein the monoclonal antibody is of a type selected from the group consisting of chimeric, humanized and human monoclonal antibodies.

7. An antibody according to Claim 5 wherein the antibody is a single chain monoclonal antibody.

8. An antibody according to Claim 1 which comprises a antibody fragment having the same binding specificity of an antibody which binds to the *S. aureus* MAP protein.

9. An antibody according to Claim 1 having a variable light sequence according to SEQ ID NO:4.

10. An antibody according to Claim 1 having a variable light sequence encoded by a nucleic acid sequence according to SEQ ID NO:3 or [degenerates thereof.]

11. An antibody according to Claim 1 having a variable heavy sequence according to SEQ ID NO:6.

12. An antibody according to Claim 1 having a variable light sequence encoded by a nucleic acid sequence according to SEQ ID NO:5 or [degenerates thereof.]

13. An antibody according to Claim 1 wherein the antibody is a polyclonal antibody.

14. Isolated antisera containing an antibody according to Claim 1.

09982992-102201

15. A diagnostic kit comprising an antibody according to Claim 1 and means for detecting binding by that antibody.

16. A diagnostic kit according to Claim 15 wherein said means for detecting binding comprises a detectable label that is linked to said antibody.

17. A method of diagnosing an infection of *S. aureus* comprising adding an antibody according to Claim 1 to a sample suspected of being infected with *S. aureus*, and determining if antibodies have bound to the sample.

18. A pharmaceutical composition for treating or preventing an infection of *S. aureus* comprising an effective amount of the antibody of Claim 1 and a pharmaceutically acceptable vehicle, carrier or excipient.

19. A method of treating or preventing an infection of *S. aureus* comprising administering to a human or animal patient an effective amount of an antibody according to Claim 1.

20. A method of inducing an immunological response comprising administering to a human or animal an isolated *S. aureus* Map10 protein.

09982992-10201  
T02201-2622860

21. A method of identifying antibodies to the Map10 protein comprising adding an isolated Map10 protein to a sample suspected of containing anti-MAP antibodies, and determining if antibodies have bound to the added Map10 protein.

22. An isolated antibody which binds to the Map10 protein from *S. aureus*.

23. An isolated antibody according to Claim 1 that [has the ability to bind] to the amino acid sequence of SEQ ID NO:2.

24. An isolated antibody according to Claim 1 that has the ability to bind to an amino acid sequence coded by the nucleic acid sequence of SEQ ID NO:1 or [degenerates thereof.]

25. An isolated antibody having a variable light sequence according to SEQ ID NO:4. *See 9*

26. An isolated antibody having a variable heavy sequence according to SEQ ID NO:6. *See 11*

27. An isolated *S. aureus* Map10 protein.

09982992-102201

*duplicate*

28. An isolated protein according to Claim 27 having an amino acid sequence according to SEQ ID NO:2.

29. An isolated protein according to Claim 27 having an amino acid sequence encoded by a nucleic acid sequence according to SEQ ID NO:1 or degenerates thereof.

09982992-102201